



AKIMA-DTSV 1 MAR 2005

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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/680,963	10/07/2003	Piotr Bobrowicz	GFI/108

1473
 FISH & NEAVE IP GROUP
 ROPES & GRAY LLP
 1251 AVENUE OF THE AMERICAS FL C3
 NEW YORK, NY 10020-1105

CONFIRMATION NO. 6071

FORMALITIES LETTER



OC000000015078740

Date Mailed: 02/01/2005

NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)

Filing Date Granted

The U.S. Patent and Trademark Office has received your reply on 12/15/2004 to the Notice to File Missing Parts (Notice) mailed 06/25/2004 and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice.

The period of reply remains as set forth in the Notice. You may, however, obtain EXTENSIONS OF TIME under the provisions of 37 CFR 1.136 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application. Replies should be mailed to: Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Replacement drawings in compliance with 37 CFR 1.84 and 37 CFR 1.121 are required. The drawings submitted are not acceptable because:
 - The drawings submitted to the Office are not electronically reproducible. Drawing sheets must be submitted on paper, which is flexible, strong, white, smooth, non-shiny, and durable (see 37 CFR 1.84(e)). See Figure(s) 14, 25-32.
- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

To Download Patentin Software, visit <http://www.uspto.gov/web/patents/software.htm>
 For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov

Replies should be mailed to: Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

*A copy of this notice **MUST** be returned with the reply.*



Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
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 - The drawings submitted to the Office are not electronically reproducible. Drawing sheets must be submitted on paper, which is flexible, strong, white, smooth, non-shiny, and durable (see 37 CFR 1.84(e)). See Figure(s) 14, 25-32.
- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

To Download Patentin Software, visit <http://www.uspto.gov/web/patents/software.htm>
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- Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov

Replies should be mailed to: Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

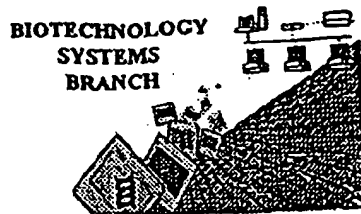
*A copy of this notice **MUST** be returned with the reply.*



Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/680,963
Source: IFWO
Date Processed by STIC: 12/21/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

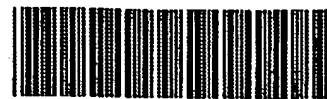
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box-1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04): U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

Raw Sequence Listing Error Summary

<u>ERROR DETECTED</u>	<u>SUGGESTED CORRECTION</u>	SERIAL NUMBER: <u>10/680,963</u>
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 <u>Wrapped Nucleics</u> <u>Wrapped Aminos</u>	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2 <u>Invalid Line Length</u>	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 <u>Misaligned Amino</u> <u>Numbering</u>	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 <u>Non-ASCII</u>	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 <u>Variable Length</u>	Sequence(s) <u> </u> contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 <u>PatentIn 2.0</u> <u>"bug"</u>	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) <u> </u> . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 <u>Skipped Sequences</u> <u>(OLD RULES)</u>	Sequence(s) <u> </u> missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 <input checked="" type="checkbox"/> <u>Skipped Sequences</u> <u>(NEW RULES)</u>	Sequence(s) <u>7-8</u> missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000 <i>← This is the valid format for intentionally skipped sequences.</i>	
9 <u>Use of n's or Xaa's</u> <u>(NEW RULES)</u>	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 <u>Invalid <213></u> <u>Response</u>	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
11 <u>Use of <220></u>	Sequence(s) <u> </u> missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 <u>PatentIn 2.0</u> <u>"bug"</u>	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 <u>Misuse of n/Xaa</u>	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid	



IFWO

RAW SEQUENCE LISTING

DATE: 12/21/2004

PATENT APPLICATION: US/10/680,963

TIME: 11:33:40

Input Set : A:\GFI-108 Sequence listing.ST25.txt

Output Set: N:\CRF4\12212004\J680963.raw

3 <110> APPLICANT: GlycoFi, Inc.
 4 Bobrowicz, Piotr
 5 Hamilton, Stephen R.
 6 Gerngross, Tilman U.
 7 Wildt, Stefan
 8 Choi, Byung-Kwon
 9 Nett, Juergen H.
 10 Davidson, Robert C.
 12 <120> TITLE OF INVENTION: N-Acetylglucosaminyltransferase III expression in lower
 13 eukaryotes
 15 <130> FILE REFERENCE: GFI-108 CIP
 17 <140> CURRENT APPLICATION NUMBER: US 10/680,963
 18 <141> CURRENT FILING DATE: 2003-10-07
 20 <150> PRIOR APPLICATION NUMBER: US 10/371,877
 21 <151> PRIOR FILING DATE: 2003-02-20
 23 <150> PRIOR APPLICATION NUMBER: US 09/892,591
 24 <151> PRIOR FILING DATE: 2001-06-27
 26 <150> PRIOR APPLICATION NUMBER: US 60/214,358
 27 <151> PRIOR FILING DATE: 2000-06-28
 29 <150> PRIOR APPLICATION NUMBER: US 60/215,638
 30 <151> PRIOR FILING DATE: 2000-06-30
 32 <150> PRIOR APPLICATION NUMBER: US 60/279,997
 33 <151> PRIOR FILING DATE: 2001-03-30
 35 <150> PRIOR APPLICATION NUMBER: PCT/US02/41510
 36 <151> PRIOR FILING DATE: 2002-12-24
 38 <150> PRIOR APPLICATION NUMBER: US 60/344,169
 39 <151> PRIOR FILING DATE: 2001-12-27
 41 <160> NUMBER OF SEQ ID NOS: 101
 43 <170> SOFTWARE: PatentIn version 3.2
 45 <210> SEQ ID NO: 1
 46 <211> LENGTH: 3
 47 <212> TYPE: PRT
 48 <213> ORGANISM: artificial
 50 <220> FEATURE:
 51 <223> OTHER INFORMATION: Glycosylation target
 54 <220> FEATURE:
 55 <221> NAME/KEY: MISC_FEATURE
 56 <222> LOCATION: (2)..(2)
 57 <223> OTHER INFORMATION: wherein "Xaa" is any amino acid except proline
 59 <400> SEQUENCE: 1
 61 Asn Xaa Ser
 62 1
 65 <210> SEQ ID NO: 2

pp 1-3,6
Does Not Comply
Corrected Diskette Needed

give source of genetic material
(see item 11 on Erra summary sheet)

RAW SEQUENCE LISTING

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TIME: 11:33:40

Input Set : A:\GFI-108 Sequence listing.ST25.txt

Output Set: N:\CRF4\12212004\J680963.raw

66 <211> LENGTH: 3
 67 <212> TYPE: PRT
 68 <213> ORGANISM: artificial
 70 <220> FEATURE:
 71 <223> OTHER INFORMATION: Glycosylation target *same error*
 74 <220> FEATURE:
 75 <221> NAME/KEY: MISC_FEATURE
 76 <222> LOCATION: (2)..(2)
 77 <223> OTHER INFORMATION: wherein "Xaa" is any amino acid except proline
 79 <400> SEQUENCE: 2
 W--> 81 Asn Xaa Thr
 82 1
 85 <210> SEQ ID NO: 3
 86 <211> LENGTH: 21
 87 <212> TYPE: DNA
 88 <213> ORGANISM: artificial
 90 <220> FEATURE:
 91 <223> OTHER INFORMATION: Primer A for target gene in P. pastoris (1,6-mannosyltransferase)
 93 <400> SEQUENCE: 3
 94 atggcgaagg cagatggcag t 21
 97 <210> SEQ ID NO: 4
 98 <211> LENGTH: 21
 99 <212> TYPE: DNA
 100 <213> ORGANISM: artificial
 102 <220> FEATURE:
 103 <223> OTHER INFORMATION: Primer B for target gene in P. pastoris (1,6-mannosyltransferase)
 105 <400> SEQUENCE: 4
 106 ttagtccttc caacttcctt c 21
 109 <210> SEQ ID NO: 5
 110 <211> LENGTH: 26
 111 <212> TYPE: DNA
 112 <213> ORGANISM: artificial
 114 <220> FEATURE:
 115 <223> OTHER INFORMATION: Primer A for target gene in P. pastoris (1,2-mannosyltransferases)
 116
 119 <220> FEATURE:
 120 <221> NAME/KEY: misc_feature
 121 <222> LOCATION: (9)..(9)
 122 <223> OTHER INFORMATION: wherein "n" is equal to "a" or "t" or "g" or "c".
 124 <220> FEATURE:
 125 <221> NAME/KEY: misc_feature
 126 <222> LOCATION: (12)..(12)
 127 <223> OTHER INFORMATION: wherein "n" is equal to "a" or "t" or "g" or "c".
 129 <220> FEATURE:
 130 <221> NAME/KEY: misc_feature
 131 <222> LOCATION: (18)..(18)
 132 <223> OTHER INFORMATION: wherein "n" is equal to "a" or "t" or "g" or "c".
 134 <400> SEQUENCE: 5
 W--> 135 taytggmgng tngarcynga yathaa 26

RAW SEQUENCE LISTING

DATE: 12/21/2004

PATENT APPLICATION: US/10/680,963

TIME: 11:33:40

Input Set : A:\GFI-108 Sequence listing.ST25.txt

Output Set: N:\CRF4\12212004\J680963.raw

138 <210> SEQ ID NO: 6
 139 <211> LENGTH: 20
 140 <212> TYPE: DNA
 141 <213> ORGANISM: artificial
 143 <220> FEATURE:
 144 <223> OTHER INFORMATION: Primer B for target gene in P. pastoris (1,2
 145 mannosyltransferases)
 148 <220> FEATURE:
 149 <221> NAME/KEY: misc_feature
 150 <222> LOCATION: (6)..(6)
 151 <223> OTHER INFORMATION: wherein "n" is equal to "a" or "t" or "g" or "c".
 153 <220> FEATURE:
 154 <221> NAME/KEY: misc_feature
 155 <222> LOCATION: (12)..(12)
 156 <223> OTHER INFORMATION: wherein "n" is equal to "a" or "t" or "g" or "c".
 158 <400> SEQUENCE: 6

W--> 159 gcrtncccc ankytcrta

20

162 <210> SEQ ID NO: 7

163 <211> LENGTH: 0

164 <212> TYPE: DNA

165 <213> ORGANISM: Kluyveromyces lactis

167 <400> SEQUENCE: 7

W--> 168 000

170 <210> SEQ ID NO: 8

171 <211> LENGTH: 0

172 <212> TYPE: PRT

173 <213> ORGANISM: Kluyveromyces lactis

175 <400> SEQUENCE: 8

W--> 176 000

178 <210> SEQ ID NO: 9

179 <211> LENGTH: 458

180 <212> TYPE: PRT

181 <213> ORGANISM: Saccharomyces cerevisiae

184 <220> FEATURE:

185 <221> NAME/KEY: MISC_FEATURE

186 <222> LOCATION: (304)..(318)

187 <223> OTHER INFORMATION: Low-complexity sequence

189 <220> FEATURE:

190 <221> NAME/KEY: MISC_FEATURE

191 <222> LOCATION: (416)..(436)

192 <223> OTHER INFORMATION: Low-complexity sequence

194 <400> SEQUENCE: 9

196 Met Glu Gly Glu Gln Ser Pro Gln Gly Glu Lys Ser Leu Gln Arg Lys

197 1 5 10 15

200 Gln Phe Val Arg Pro Pro Leu Asp Leu Trp Gln Asp Leu Lys Asp Gly

201 20 25 30

204 Val Arg Tyr Val Ile Phe Asp Cys Arg Ala Asn Leu Ile Val Met Pro

205 35 40 45

208 Leu Leu Ile Leu Phe Glu Ser Met Leu Cys Lys Ile Ile Ile Lys Lys

*delete this section
 (see item 8 on Error summary sheet)
 for valid format*

*Do the same with
 sequences 43 and 44*

delete

*yes, but which amino acid(s) do
 the Xaa's represent?*

same error

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Input Set : A:\GFI-108 Sequence listing.ST25.txt

Output Set: N:\CRF4\12212004\J680963.raw

```

209      50      55      60
212 Val Ala Tyr Thr Glu Ile Asp Tyr Lys Ala Tyr Met Glu Gln Ile Glu
213 65      70      75      80
216 Met Ile Gln Leu Asp Gly Met Leu Asp Tyr Ser Gln Val Ser Gly Gly
217      85      90      95
220 Thr Gly Pro Leu Val Tyr Pro Ala Gly His_Val Leu Ile Tyr Lys Met
221      100      105      110
224 Met Tyr Trp Leu Thr Glu Gly Met Asp His Val Glu Arg Gly Gln Val
225      115      120      125
228 Phe Phe Arg Tyr Leu Tyr Leu Leu Thr Leu Ala Leu Gln Met Ala Cys
229      130      135      140
232 Tyr Tyr Leu Leu His Leu Pro Pro Trp Cys Val Val Leu Ala Cys Leu
233 145      150      155      160
236 Ser Lys Arg Leu His Ser Ile Tyr Val Leu Arg Leu Phe Asn Asp Cys
237      165      170      175
240 Phe Thr Thr Leu Phe Met Val Val Thr Val Leu Gly Ala Ile Val Ala
241      180      185      190
244 Ser Arg Cys His Gln Arg Pro Lys Leu Lys Lys Ser Leu Ala Leu Val
245      195      200      205
248 Ile Ser Ala Thr Tyr Ser Met Ala Val Ser Ile Lys Met Asn Ala Leu
249      210      215      220
252 Leu Tyr Phe Pro Ala Met Met Ile Ser Leu Phe Ile Leu Asn Asp Ala
253 225      230      235      240
256 Asn Val Ile Leu Thr Leu Leu Asp Leu Val Ala Met Ile Ala Trp Gln
257      245      250      255
260 Val Ala Val Ala Val Pro Phe Leu Arg Ser Phe Pro Gln Gln Tyr Leu
261      260      265      270
264 His Cys Ala Phe Asn Phe Gly Arg Lys Phe Met Tyr Gln Trp Ser Ile
265      275      280      285
W--> 268 Asn Trp Gln Met Met Asp Glu Glu Ala Phe Asn Asp Lys Arg Phe Xaa
269      290      295      300
272 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Phe Val
273 305      310      315      320
276 Thr Arg Tyr Pro Arg Ile Leu Pro Asp Leu Trp Ser Ser Leu Cys His
277      325      330      335
280 Pro Leu Arg Lys Asn Ala Val Leu Asn Ala Asn Pro Ala Lys Thr Ile
281      340      345      350
284 Pro Phe Val Leu Ile Ala Ser Asn Phe Ile Gly Val Leu Phe Ser Arg
285      355      360      365
288 Ser Leu His Tyr Gln Phe Leu Ser Trp Tyr His Trp Thr Leu Pro Ile
289      370      375      380
292 Leu Ile Phe Trp Ser Gly Met Pro Phe Phe Val Gly Pro Ile Trp Tyr
293 385      390      395      400
296 Val Leu His Glu Trp Cys Trp Asn Ser Tyr Pro Pro Asn Ser Gln Xaa
297      405      410      415
300 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
301      420      425      430
304 Xaa Xaa Xaa Xaa Ser Gly Ser Val Ala Leu Ala Lys Ser His Leu Arg
305      435      440      445

```

RAW SEQUENCE LISTING

DATE: 12/21/2004

PATENT APPLICATION: US/10/680,963

TIME: 11:33:40

Input Set : A:\GFI-108 Sequence listing.ST25.txt

Output Set: N:\CRF4\12212004\J680963.raw

```

308 Thr Thr Ser Ser Met Glu Lys Lys Leu Asn
309      450                      455
312 <210> SEQ ID NO: 10
313 <211> LENGTH: 458
314 <212> TYPE: PRT
315 <213> ORGANISM: Saccharomyces cerevisiae
317 <400> SEQUENCE: 10
319 Met Glu Gly Glu Gln Ser Pro Gln Gly Glu Lys Ser Leu Gln Arg Lys
320 1      5      10      15
323 Gln Phe Val Arg Pro Pro Leu Asp Leu Trp Gln Asp Leu Lys Asp Gly
324      20      25      30
327 Val Arg Tyr Val Ile Phe Asp Cys Arg Ala Asn Leu Ile Val Met Pro
328      35      40      45
331 Leu Leu Ile Leu Phe Glu Ser Met Leu Cys Lys Ile Ile Ile Lys Lys
332      50      55      60
335 Val Ala Tyr Thr Glu Ile Asp Tyr Lys Ala Tyr Met Glu Gln Ile Glu
336 65      70      75      80
339 Met Ile Gln Leu Asp Gly Met Leu Asp Tyr Ser Gln Val Ser Gly Gly
340      85      90      95
343 Thr Gly Pro Leu Val Tyr Pro Ala Gly His Val Leu Ile Tyr Lys Met
344      100     105     110
347 Met Tyr Trp Leu Thr Glu Gly Met Asp His Val Glu Arg Gly Gln Val
348      115     120     125
351 Phe Phe Arg Tyr Leu Tyr Leu Thr Leu Ala Leu Gln Met Ala Cys
352      130     135     140
355 Tyr Tyr Leu Leu His Leu Pro Pro Trp Cys Val Val Leu Ala Cys Leu
356 145      150     155     160
359 Ser Lys Arg Leu His Ser Ile Tyr Val Leu Arg Leu Phe Asn Asp Cys
360      165     170     175
363 Phe Thr Thr Leu Phe Met Val Val Thr Val Leu Gly Ala Ile Val Ala
364      180     185     190
367 Ser Arg Cys His Gln Arg Pro Lys Leu Lys Lys Ser Leu Ala Leu Val
368      195     200     205
371 Ile Ser Ala Thr Tyr Ser Met Ala Val Ser Ile Lys Met Asn Ala Leu
372      210     215     220
375 Leu Tyr Phe Pro Ala Met Met Ile Ser Leu Phe Ile Leu Asn Asp Ala
376 225     230     235     240
379 Asn Val Ile Leu Thr Leu Leu Asp Leu Val Ala Met Ile Ala Trp Gln
380      245     250     255
383 Val Ala Val Ala Val Pro Phe Leu Arg Ser Phe Pro Gln Gln Tyr Leu
384      260     265     270
387 His Cys Ala Phe Asn Phe Gly Arg Lys Phe Met Tyr Gln Trp Ser Ile
388      275     280     285
391 Asn Trp Gln Met Met Asp Glu Glu Ala Phe Asn Asp Lys Arg Phe His
392      290     295     300
395 Leu Ala Leu Leu Ile Ser His Leu Ile Ala Leu Thr Thr Leu Phe Val
396 305     310     315     320
399 Thr Arg Tyr Pro Arg Ile Leu Pro Asp Leu Trp Ser Ser Leu Cys His
400      325     330     335

```

VERIFICATION SUMMARY

DATE: 12/21/2004

PATENT APPLICATION: US/10/680,963

TIME: 11:33:41

Input Set : A:\GFI-108 Sequence listing.ST25.txt

Output Set: N:\CRF4\12212004\J680963.raw

..61 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
..81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
..135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
..159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
..168 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (7) SEQUENCE:
..176 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (8) SEQUENCE:
..268 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:288
!341 Repeated in SeqNo=9
..516 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:272
!341 Repeated in SeqNo=11
..1467 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:208
!341 Repeated in SeqNo=25
..1692 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:176
!341 Repeated in SeqNo=27
..1909 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:160
!341 Repeated in SeqNo=29
..2126 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:160
!341 Repeated in SeqNo=31
..2547 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (43) SEQUENCE:
..2555 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (44) SEQUENCE:
..3343 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:0

VERIFICATION SUMMARY

DATE: 12/21/2004

PATENT APPLICATION: US/10/680,963

TIME: 11:33:41

Input Set : A:\GFI-108 Sequence listing.ST25.txt

Output Set: N:\CRF4\12212004\J680963.raw

..61 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
..81 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
..135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
..159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
..168 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (7) SEQUENCE:
..176 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (8) SEQUENCE:
..268 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:288
!341 Repeated in SeqNo=9
..516 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:272
!341 Repeated in SeqNo=11
..1467 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:208
!341 Repeated in SeqNo=25
..1692 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:176
!341 Repeated in SeqNo=27
..1909 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:160
!341 Repeated in SeqNo=29
..2126 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:160
!341 Repeated in SeqNo=31
..2547 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (43) SEQUENCE:
..2555 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (44) SEQUENCE:
..3343 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:0

Organization _____ Bldg./Room _____

U. S. DEPARTMENT OF COMMERCE

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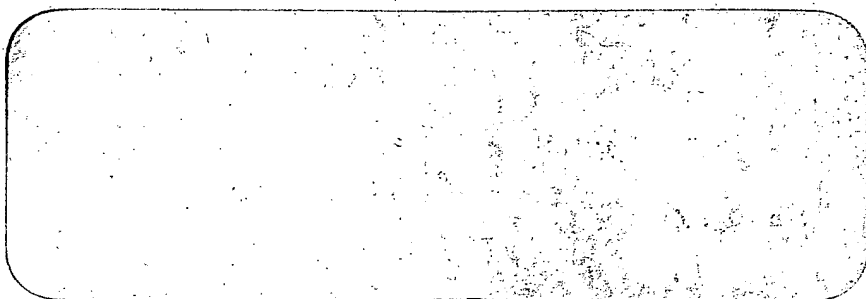
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